WHAT RESULT DO WE WANT?

All people in North Carolina have access to comprehensive, high quality, affordable health care provided by clinicians who identify with the culture of people they serve.

WHY IS THIS IMPORTANT?

Having a primary care provider (PCP) is important for maintaining health and preventing and managing serious diseases. PCPs can develop long-term relationships with patients and coordinate care across health care providers. Strategies like team-based care and innovative payment methods are promising approaches for improving access to primary care.[1]

HNC 2030 HEADLINE INDICATOR:

Number of NC counties with a primary care workforce to county population ratio of 1:1,500

Primary care workforce as a ratio of the number of full-time equivalent primary care clinicians

WHAT DOES THIS INDICATOR MEASURE?

TThis indicator is a measurement of geographic access to health care expressed as a ratio of clinician to population. Lower is better: 1:2000 is better than 1:4000. The HNC 2030 target is 1:1,500. The *HNC 2030* target is 1500:1. Clinicians include primary care physicians, physician assistants, nurse practitioners, and certified nurse midwives.

Licensure data for clinicians in North Carolina is the *primary* data source. Clinicians are assigned to a county based on primary practice location:

- A primary care clinician is a physician or physician assistant practicing family medicine, general internal medicine, pediatrics, or obstetrics and gynecology
- A nurse practitioner must be certified in a primary care specialty, e.g., a family nurse practitioner and working in a primary care setting, e.g., not a hospital
- A certified nurse midwife working in a primary care setting, e.g., not a hospital
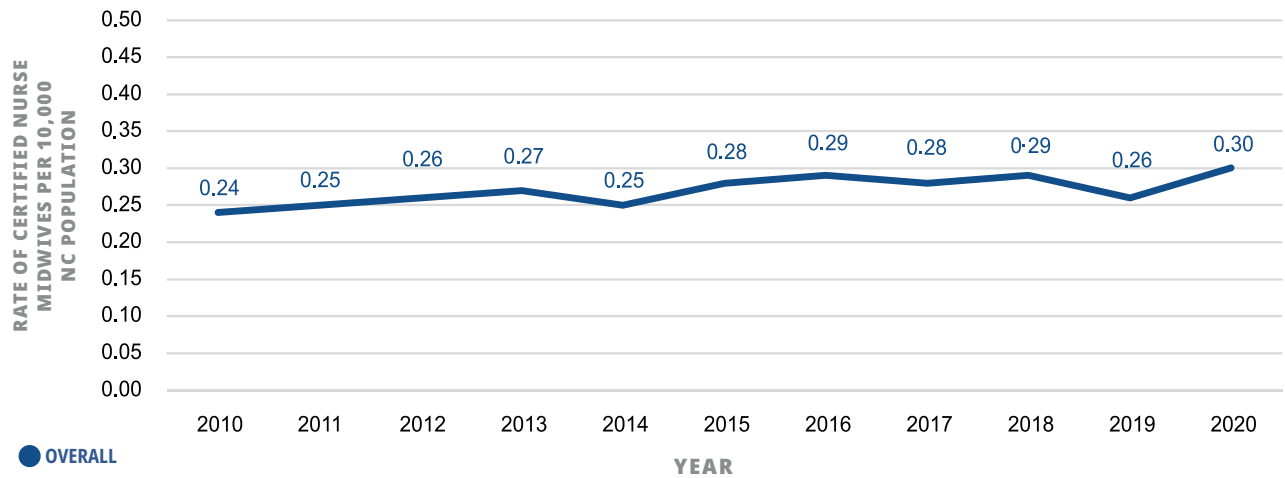
BASELINE DATA FROM *HNC 2030*

BASELINE
2017
62

RECENT
2019
59

TARGET
2030
25% decrease for counties above 1:1500 ratio

HOW ARE WE DOING?

- **Distribution of primary care clinicians per county population remains constant since 2017.**

- **Over the last decade, there has been an increase in the number of underrepresented minority clinicians (Certified nurse midwives, nurse practitioners, and primary care physicians).**

- **Nurse practitioners have seen the greatest rate of increase among all types of primary care clinicians going from 3.8 (2010) to 8.1 (2020) per 10,000 population.**
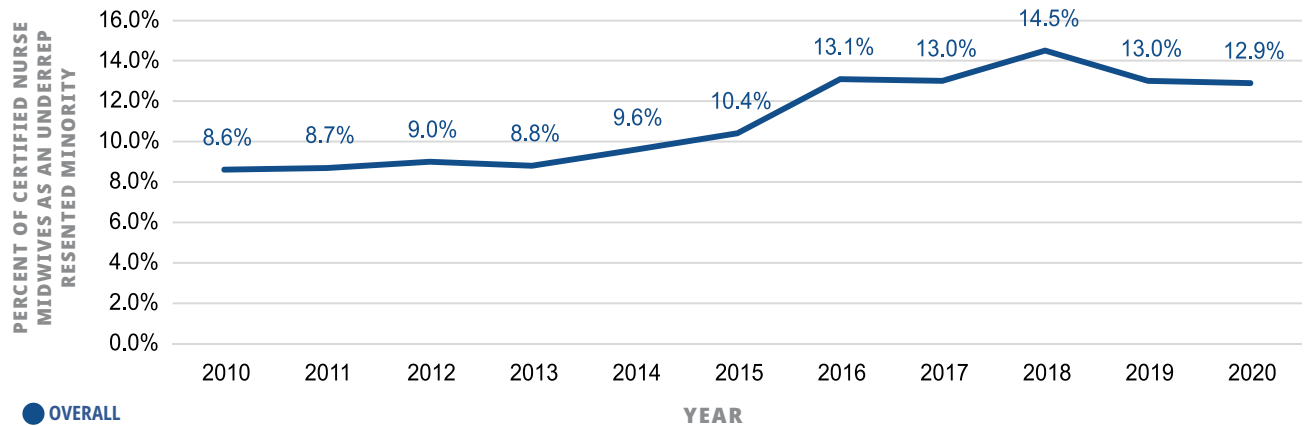
CURRENT DATA TRENDED OVER TIME

Figure 68. Certified nurse midwives in North Carolina (2010 - 2020)

Data points (Rate of certified nurse midwives per 10,000 NC population):
- 2010: 0.24
- 2011: 0.25
- 2012: 0.26
- 2013: 0.27
- 2014: 0.25
- 2015: 0.28
- 2016: 0.29
- 2017: 0.28
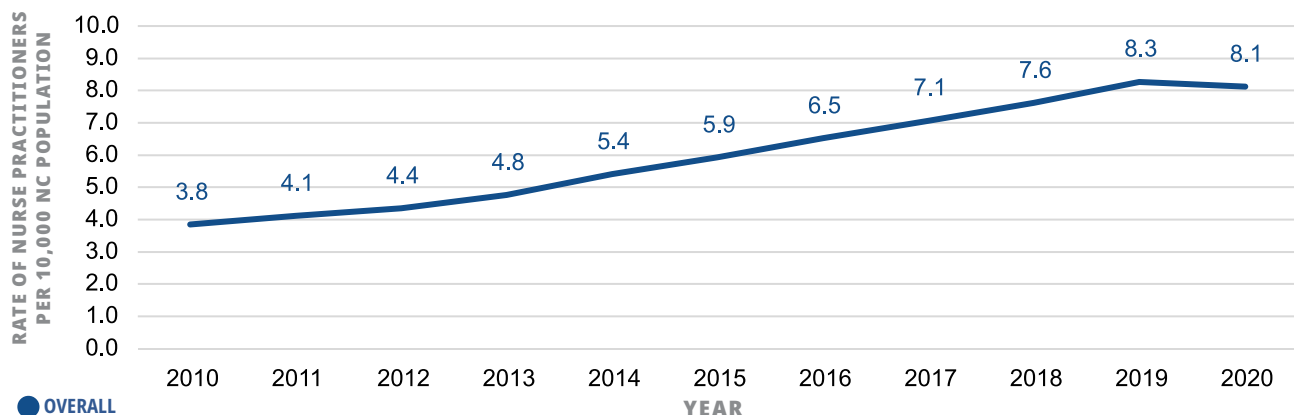- 2018: 0.29
- 2019: 0.26
- 2020: 0.30

OVERALL

Data source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created December 27, 2021 at https://nchealthworkforce.unc.edu/interace/supply/.

Figure 69. Certified nurse midwives as an underrepresented minority in North Carolina (2010 - 2020)

Data points (Percent of certified nurse midwives as an underrepresented minority):
- 2010: 8.6%
- 2011: 8.7%
- 2012: 9.0%
- 2013: 8.8%
- 2014: 9.6%
- 2015: 10.4%
- 2016: 13.1%
- 2017: 13.0%
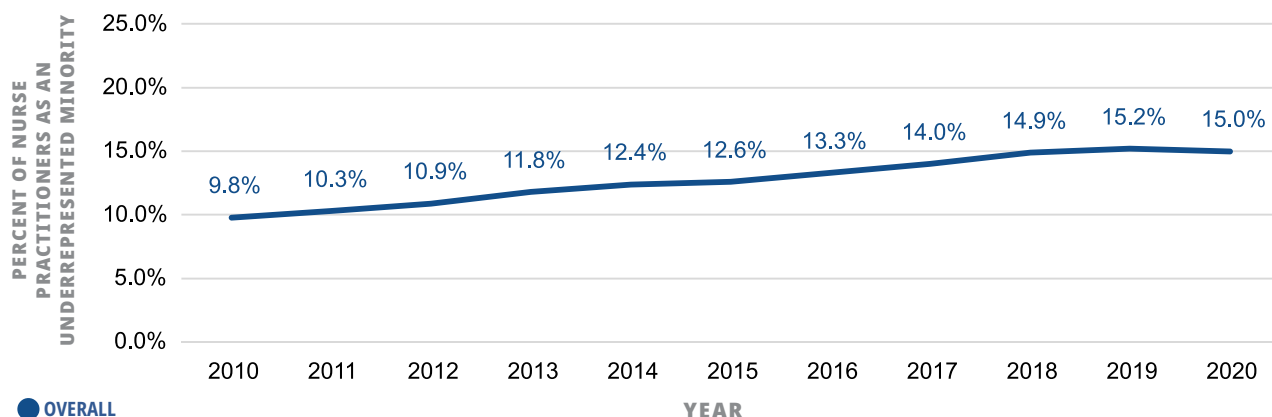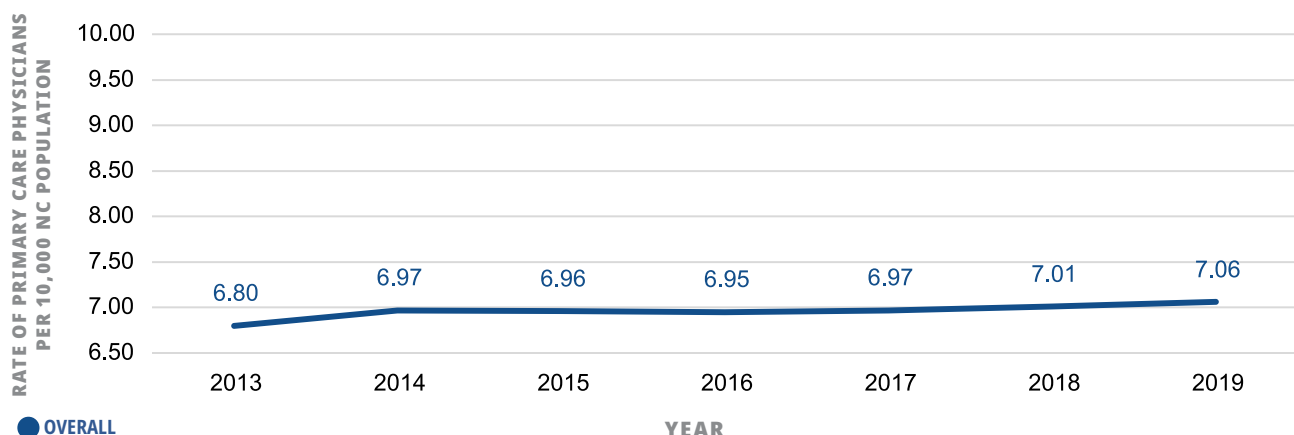- 2018: 14.5%
- 2019: 13.0%
- 2020: 12.9%

OVERALL

Data source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created December 27, 2021 at https://nchealthworkforce.unc.edu/interace/supply/.

Figure 70. Nurse practitioners in North Carolina (2010 - 2020)

RATE OF NURSE PRACTITIONERS PER 10,000 NC POPULATION

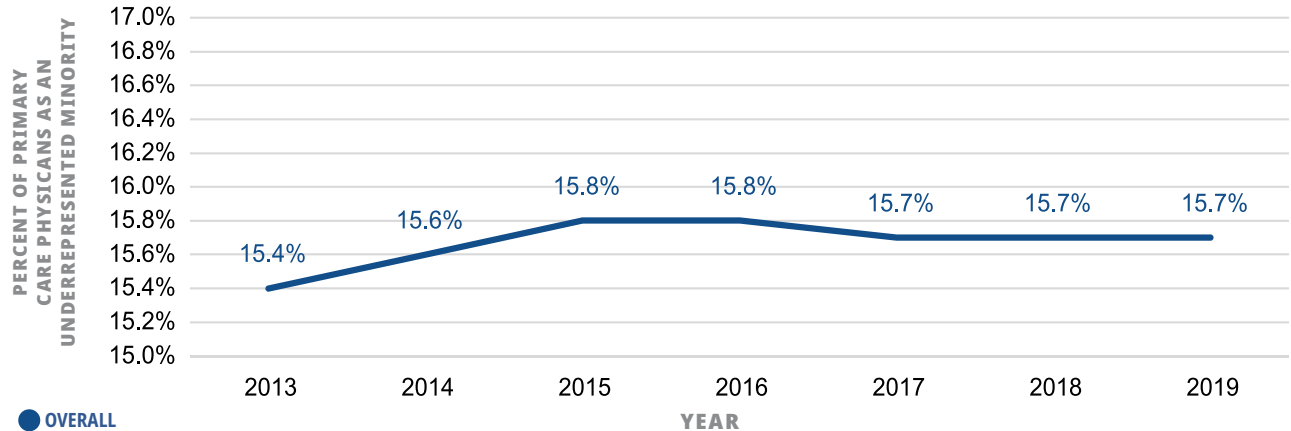| Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Overall	3.8	4.1	4.4	4.8	5.4	5.9	6.5	7.1	7.6	8.3	8.1

YEAR

● OVERALL

Data source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created December 27, 2021 at https://nchealthworkforce.unc.edu/interace/supply/.

Figure 71. Nurse practitioners as an underrepresented minority in North Carolina (2010 - 2020)

PERCENT OF NURSE PRACTITIONERS AS AN UNDERREPRESENTED MINORITY

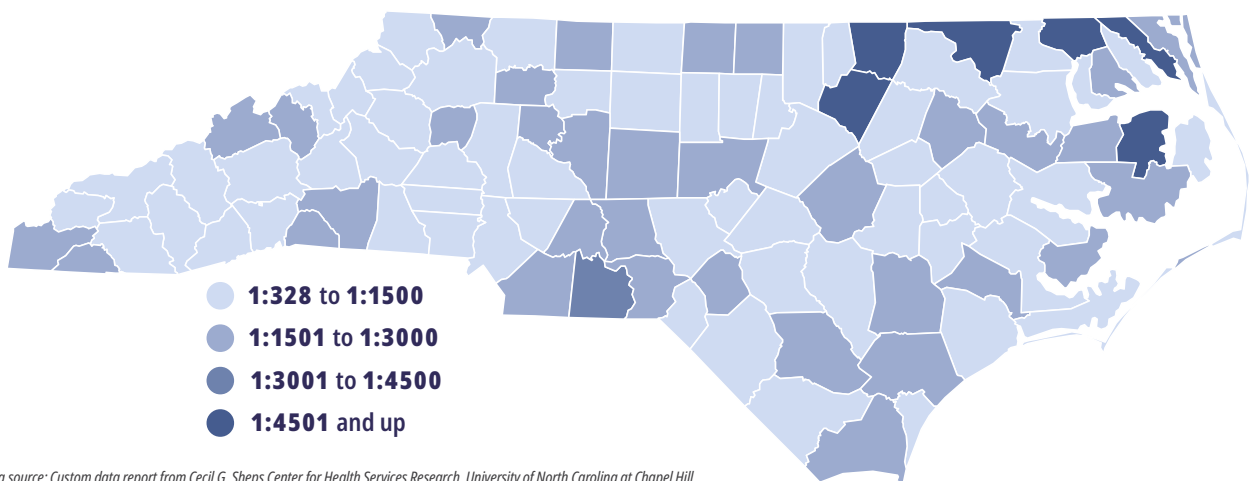| Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Overall	9.8%	10.3%	10.9%	11.8%	12.4%	12.6%	13.3%	14.0%	14.9%	15.2%	15.0%

YEAR

● OVERALL

Data source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created December 27, 2021 at https://nchealthworkforce.unc.edu/interace/supply/.

Figure 72. Primary care physicians in North Carolina (2013 - 2019)

RATE OF PRIMARY CARE PHYSICIANS PER 10,000 NC POPULATION

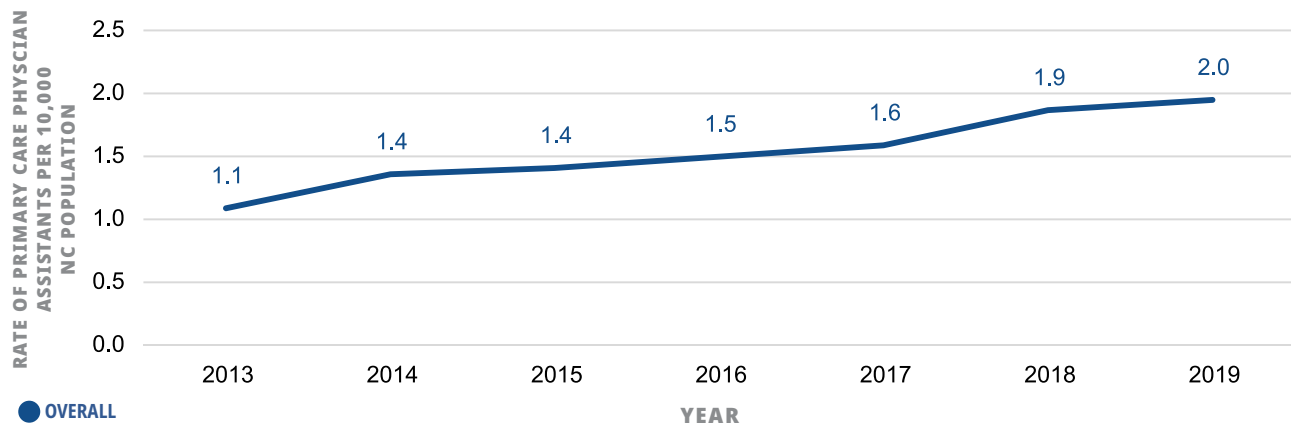| Year	2013	2014	2015	2016	2017	2018	2019
Overall	6.80	6.97	6.96	6.95	6.97	7.01	7.06

YEAR

● OVERALL

Data source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created December 27, 2021 at https://nchealthworkforce.unc.edu/interace/supply/.

Figure 73. Primary care physicians as an underrespresented minority in North Carolina (2013 - 2019)

PERCENT OF PRIMARY CARE PHYSICANS AS AN UNDERREPRESENTED MINORITY

- 2013: 15.4%
- 2014: 15.6%
- 2015: 15.8%
- 2016: 15.8%
- 2017: 15.7%
- 2018: 15.7%
- 2019: 15.7%

● OVERALL

YEAR

Data source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created December 27, 2021 at https://nchealthworkforce.unc.edu/interace/supply/.

Figure 74. Population per primary care clinician in North Carolina (2019)

- 1:328 to 1:1500
- 1:1501 to 1:3000
- 1:3001 to 1:4500
- 1:4501 and up

Data source: Custom data report from Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Figure 75. Physician assitants with primary practice listed as primary care in North Carolina (2013 - 2019)

RATE OF PRIMARY CARE PHYSICIAN ASSISTANTS PER 10,000 NC POPULATION

- 2013: 1.1
- 2014: 1.4
- 2015: 1.4
- 2016: 1.5
- 2017: 1.6
- 2018: 1.9
- 2019: 2.0

● OVERALL

YEAR

Data source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created December 27, 2021 at https://nchealthworkforce.unc.edu/interace/supply/.

THE STORY BEHIND THE CURVE

Access to health services means "the timely use of personal health services to achieve the best health outcomes." A lack of access to care can impact overall physical, social, and mental health. It can also affect someone's quality of life and livelihood. Barriers to access typically include the high cost of care, inadequate or no insurance coverage, and a lack of available services (geographically or remotely), especially culturally competent care. These barriers can lead to unmet health needs, delays in receiving appropriate care, an inability to get preventive services, preventable hospitalizations, and financial burdens. Access to care often varies by race/ethnicity, socioeconomic status, age, sex, disability status, sexual orientation, gender identity, and residential location.

Source: Healthy People 2030 Access to Health Services Workgroup

Participants in the 2021 NC SHIP Community Council Meeting and Stakeholder Symposia elaborated on the story of primary care in North Carolina with these comments:

- "Surprising that certified nurse midwives (CNMs) are weighted at 0.75 in primary care when an obstetrician (OB) is weighted at 0.25 and most CNMs work in OB."

- "To the point regarding CNM vs OBs time splitting: CNMs do mostly deliveries, OB visits, and prescribing birth control, and annual exams are all primary care activities. OBs are mostly surgical so actually, we under-valued CNMs in this regard."

- "The correlation of good health outcomes in quality primary care is the level of continuity and comprehensiveness – it's the longitudinal relationship and the understanding of all of the indicators and factors putting the puzzle together."

- "We have a data problem in counting population per primary care practitioner – example in Chatham Co. Most of the physicians that work in Northern Chatham Co., have a primary practice in Orange County, but their ambulatory office may be in Chatham County."

- "There are primary care physicians that have practices in one county, but they may go out to surrounding counties three days per week but are not counted in those counties."

- "I am willing to accept that the data is not perfect and that this is all that we have, but it is bothersome that there is no sense of "part-time-edness". Most physicians in academic health settings are going to be less than one half clinical. In addition, you have people in various stages of retirement or family life cycle. This is a big impact on access that we have no way to estimate."

- "This is also an AWESOME measure because it now includes advanced practice providers whereas previously it only captured primary care physicians. This is a huge advance and is really appreciated. No doubt it can still be refined but it is still a great advance from what we had been using."

WHAT OTHER DATA DO WE NEED?

- Stories from consumers/residents and their experiences around access to primary care in their community
- Contact information for all health care providers
- Number and experience of people who reside in North Carolina but seek health care in neighboring states
- Map safety net service availability and gaps including primary care, prenatal/postnatal care, dental, and behavioral health care
- Telehealth availability

WHAT COULD WORK TO TURN THE CURVE?

- Assess recruitment strategies used by colleges and universities that focus on rural needs
- Develop long-term solutions to healthcare workforce challenges with emphasis on increasing the number of North Carolina health care providers from historically marginalized populations
- Ensure highspeed internet access to support access to telehealth, electronic health records and controlled substance reporting system sites
- Expand Medicaid to support financial viability of primary care providers serving low-income patients
- Expand medical school training and learning experiences focused on the skills necessary to practice successfully in rural areas
- Grow NCCARE360 by adding more health systems, payers, providers
- Increase patient access and provide for adequate compensation for consultations with specialists
- Increase requirement for number of rural health clinical rotations for physician assistants (PAs) and Advanced Practice Nurses (APNs)
- Increase telehealth primary care initiatives in rural areas
- Increase the number of residency positions in rural areas
- Invest in rural economies
- Review and optimize middle and high school career and tutoring programs to augment math and science skills
- Support increased funding for provider loan repayment programs that incentivize primary care providers to practice in medically underserved areas
- Support pipeline programs in rural areas to encourage high school and college students to pursue careers in medicine and primary care

RECOMMENDED READING/LISTENING

NC Health Info: Empowering Your Health Care Decisions.
https://www.nchealthinfo.org/providers-services/

NC Medicaid/Health Choice Primary Care Providers.
https://medicaid.ncdhhs.gov/documents/medicaid-health-choice-primary-care-providers

NC PARTNERS WHO CAN HELP US

PARTNER/POTENTIAL PARTNER	WEBSITE LINK
College Foundation of North Carolina (CFNC)	https://www.cfnc.org/
Community Care of North Carolina (CCNC)	https://www.communitycarenc.org/
Duke Health's Primary Care Preceptor Development Mini-Fellowship Program	https://fmch.duke.edu/education-training/primary-care-preceptor-development-mini-fellowship
Mountain Area Health Education Center (MAHEC)	https://mahec.net/
Mountain Community Health Partnership (MCHP)	https://www.mchp.care/
NC DHHS Office of Rural Health	https://www.ncdhhs.gov/divisions/orh
NC Medical Society	https://www.ncmedsoc.org/
North Carolina Academy of Physician Assistants (NCAPA)	http://ncapa.org/
North Carolina Alliance for Health Professions Diversity (NCAHPD)	https://ncahpd.org/
North Carolina Area Health Education Centers (NC AHEC)	https://www.ncahec.net/healthy-north-carolina-2030/
North Carolina Association of Free & Charitable Clinics (NCAFCC)	https://ncafcc.org/
North Carolina Association of Local Health Directors (NCALHD)	https://www.ncalhd.org/
North Carolina Community Health Center Association (NCCHCA)	https://www.ncchca.org/
North Carolina Healthcare Association (NCHA)	https://www.ncha.org/
North Carolina Health Occupations Students of America (NC HOSA)	http://nchosa.org/
North Carolina Institute of Medicine (NCIOM)	https://nciom.org/
North Carolina Medical Board	https://www.ncmedboard.org/
North Carolina Public Health Association (NCPHA)	https://ncpha.memberclicks.net/
North Carolina Nurses Association (NCNA)	https://www.ncnurses.org/
North Carolina Pediatric Society (NCPeds)	https://www.ncpeds.org/
Office of Rural Initiatives at UNC	https://www.med.unc.edu/inclusion/ori/
Primary Care Advisory Committee (PCAC) Office of Rural Health	https://nosorh.org/6-promising-practice-nc-office-of-rural-health-helps-rural-providers-get-connected-to-hit/
The Cecil G. Sheps Center for Health Services Research at UNC	https://www.shepscenter.unc.edu/